

Use Attainability Analysis

for

WBID 0849 Heaths Creek

Submitted by

Missouri Department of Natural Resources Staff

To

Missouri Department of Natural Resources
Water Protection Program

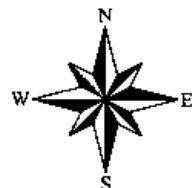
Heaths Creek (C) #0849 Pettis County



Legend

- Roads
- Classified Waterbodies

0 0.5 1 2 Miles



Field Data Sheets for Recreational Use Stream Surveys

Data Sheet A - Water Body Identification

| | |
|--|--------------------------------------|
| Water Body Name: (from USGS 7.5' quad) | <i>Heath's Creek (C)</i> |
| 8-digit HUC: | <i>10300103</i> |
| Missouri WBID #: | <i>849</i> |
| County: | <i>Pettis</i> |
| Upstream Legal Description: | |
| Downstream Legal Description: | |
| Upstream Coordinates: (UGS 84, ddd.ddddd) | |
| Downstream Coordinates: (UGS 84, ddd.ddddd) | |
| Discharger Facility Name(s): | |
| Discharger Permit Number(s): | |
| Number of Sites Evaluated: | <i>3</i> |
| Name of Surveyor and Telephone Number: | <i>Crawford / Penny 573-751-5827</i> |
| Organization: | <i>DNR</i> |
| Position: | <i>ES</i> |

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: *Ann Crawford* Date: *6-22-05*

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

| | | |
|--|---|--|
| Missouri WBID #: <u>849-001</u> | Site Location Description: <u>1. culvert</u> <u>Heath's Creek Rt D. bridge</u> | |
| Site GPS Coordinates: <u>13</u> | Facility Name: | |
| Date & Time: <u>6/22/05 at 2:45</u> | Permit Number: | |
| Personnel: <u>Crawford & Peery</u> | Weather Conditions for Past 7 days: <u>dry</u> | |
| Current Weather Conditions: <u>partly cloudy</u> | Other: | |
| Photo Ids: Upstream: <u>89-91</u> | Downstream: <u>92-95</u> | |

Uses Observed*:

| | | | | |
|---------------------------------------|--------------------------------------|---------------------------------------|---|---------------------------------------|
| <input type="checkbox"/> Swimming | <input type="checkbox"/> Skin diving | <input type="checkbox"/> SCUBA diving | <input type="checkbox"/> Tubing | <input type="checkbox"/> Water skiing |
| <input type="checkbox"/> Wind surfing | <input type="checkbox"/> Kayaking | <input type="checkbox"/> Boating | <input type="checkbox"/> Wading | <input type="checkbox"/> Rafting |
| <input type="checkbox"/> Hunting | <input type="checkbox"/> Trapping | <input type="checkbox"/> Fishing | <input checked="" type="checkbox"/> None of the above | <input type="checkbox"/> Other: |

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Cattle fence

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

| | | | | |
|--|--------------------------------------|---|--|---|
| <input type="checkbox"/> City/county parks | <input type="checkbox"/> Playgrounds | <input type="checkbox"/> MDC conservation lands | <input type="checkbox"/> Urban areas | <input type="checkbox"/> Campgrounds |
| <input type="checkbox"/> Boating accesses | <input type="checkbox"/> State parks | <input type="checkbox"/> National forests | <input type="checkbox"/> Nature trails | <input type="checkbox"/> Stairs/walkway |
| <input type="checkbox"/> No trespass sign | <input type="checkbox"/> Fence | <input type="checkbox"/> Steep slopes | <input type="checkbox"/> Other: <u>N/A</u> | |

Evidence of Human Use*:

| | | | | |
|--|--|--|---|--|
| <input type="checkbox"/> Roads | <input type="checkbox"/> Foot paths/prints | <input type="checkbox"/> Dock/platform | <input type="checkbox"/> Livestock Watering | <input type="checkbox"/> RV / ATV Tracks |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> NPDES Discharge | <input type="checkbox"/> Fishing Tackle |
| <input type="checkbox"/> Other: <u>N/A</u> <u>Some plastic bottles (milk jug, oil jug)</u> | | | | |

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Stream Morphology:

Upstream View Physical Dimensions: woods, corn fields, steep banks

| | | | | |
|--|----------------------|---|-----------------------------------|---------------------------|
| <input type="checkbox"/> Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input type="checkbox"/> Run | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input checked="" type="checkbox"/> Pool | Width (ft): <u>4</u> | Length (ft): <u>20</u> | Avg. Depth (ft): <u>3/4</u> | Max. Depth (ft): <u>1</u> |
| <input checked="" type="checkbox"/> Flow | Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Estimated (ft ³ /sec): | |

Downstream View Physical Dimensions: crop land

| | | | | |
|--|----------------------|---|-----------------------------------|-----------------------------|
| <input type="checkbox"/> Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input type="checkbox"/> Run | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input checked="" type="checkbox"/> Pool | Width (ft): <u>4</u> | Length (ft): <u>6</u> | Avg. Depth (ft): <u>1/2</u> | Max. Depth (ft): <u>1/2</u> |
| <input checked="" type="checkbox"/> Flow | Present? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Estimated (ft ³ /sec): | |

Substrate*: (These values should add up to 100%.)

| | | | | | |
|--------------------|--------------------|------------------|------------------|------------|-----------|
| <u>30</u> % Cobble | <u>20</u> % Gravel | <u>25</u> % Sand | <u>25</u> % Silt | % Mud/Clay | % Bedrock |
|--------------------|--------------------|------------------|------------------|------------|-----------|

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

| |
|-------------------|
| <u>some algae</u> |
|-------------------|

Water Characteristics*: (Mark all that apply.)

| | | | | | |
|------------------|---------------------------------|---|--|--|---------------------------------|
| Odor: | <input type="checkbox"/> Sewage | <input type="checkbox"/> Musky | <input type="checkbox"/> Chemical | <input checked="" type="checkbox"/> None | <input type="checkbox"/> Other: |
| Color: | <input type="checkbox"/> Clear | <input checked="" type="checkbox"/> Green | <input type="checkbox"/> Gray | <input type="checkbox"/> Milky | <input type="checkbox"/> Other: |
| Bottom Deposit: | <input type="checkbox"/> Sludge | <input type="checkbox"/> Solids | <input checked="" type="checkbox"/> Fine sediments | <input type="checkbox"/> None | <input type="checkbox"/> Other: |
| Surface Deposit: | <input type="checkbox"/> Oil | <input type="checkbox"/> Scum | <input type="checkbox"/> Foam | <input checked="" type="checkbox"/> None | <input type="checkbox"/> Other: |

Comments: Please attach additional comments (including information from interviews) to this form.

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Ann Crawford Date: 6-22-05
 Organization: DNR Position: ES



0849_01_US



0849_01_DS







Stockyard at end of road (Schlomer Rd). Farmer let us use his farm "road" to get to creek.

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site) *Farmers*

| | | |
|--|--|-----------------|
| Missouri WBID #: <i>849-002 Alt</i> | Site Location Description: <i>Heath's Creek "Farmers ford"</i> | |
| Site GPS Coordinates: | | |
| Date & Time: <i>6/22/05 13:00:14:15</i> | Facility Name: | |
| Personnel: <i>Crawford & Peery</i> | Permit Number: | |
| Current Weather Conditions: <i>partly cloudy</i> | Weather Conditions for Past 7 days: <i>dry</i> | |
| Photo Ids: Upstream: <i>96-98</i> | Downstream: <i>98-101</i> | Other: <i>J</i> |

1 pic. deleted or 99

Uses Observed*:

| | | | | |
|---------------------------------------|--------------------------------------|---------------------------------------|--|--|
| <input type="checkbox"/> Swimming | <input type="checkbox"/> Skin diving | <input type="checkbox"/> SCUBA diving | <input type="checkbox"/> Tubing | <input type="checkbox"/> Water skiing |
| <input type="checkbox"/> Wind surfing | <input type="checkbox"/> Kayaking | <input type="checkbox"/> Boating | <input type="checkbox"/> Wading | <input type="checkbox"/> Rafting |
| <input type="checkbox"/> Hunting | <input type="checkbox"/> Trapping | <input type="checkbox"/> Fishing | <input type="checkbox"/> None of the above | <input checked="" type="checkbox"/> Other: <i>Ford</i> |

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Alt 002 is farmer's ford - no trash or evidence of human use for recreation

Farmer says people have ^{swim} on occasion.

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

| | | | | |
|--|--------------------------------------|---|--|---|
| <input type="checkbox"/> City/county parks | <input type="checkbox"/> Playgrounds | <input type="checkbox"/> MDC conservation lands | <input type="checkbox"/> Urban areas | <input type="checkbox"/> Campgrounds |
| <input type="checkbox"/> Boating accesses | <input type="checkbox"/> State parks | <input type="checkbox"/> National forests | <input type="checkbox"/> Nature trails | <input type="checkbox"/> Stairs/walkway |
| <input type="checkbox"/> No trespass sign | <input type="checkbox"/> Fence | <input type="checkbox"/> Steep slopes | <input type="checkbox"/> Other: <i>N/A</i> | |

Evidence of Human Use*:

| | | | | |
|---|--|--|---|--|
| <input type="checkbox"/> Roads | <input type="checkbox"/> Foot paths/prints | <input type="checkbox"/> Dock/platform | <input type="checkbox"/> Livestock Watering | <input type="checkbox"/> RV / ATV Tracks |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> NPDES Discharge | <input type="checkbox"/> Fishing Tackle |
| <input checked="" type="checkbox"/> Other: <i>Ford - farmer access road</i> | | | | |

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

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Stream Morphology:

Upstream View Physical Dimensions: all ag. row crops Some riparian

| | | | | |
|---|---|-----------------------------------|--------------------------------|--------------------------------|
| <input type="checkbox"/> Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input checked="" type="checkbox"/> Run | Width (ft): <u>30'</u> | Length (ft): <u>100'</u> | Avg. Depth (ft): <u>1 3/4'</u> | Max. Depth (ft): <u>2 1/2'</u> |
| <input type="checkbox"/> Pool | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input type="checkbox"/> Flow Present? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Estimated (ft ³ /sec): | | |

could be deep in area cur

Downstream View Physical Dimensions:

| | | | | |
|--|---|-----------------------------------|----------------------------|--------------------------------|
| <input type="checkbox"/> Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input type="checkbox"/> Run | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input checked="" type="checkbox"/> Pool | Width (ft): <u>30'</u> | Length (ft): <u>130'</u> | Avg. Depth (ft): <u>2'</u> | Max. Depth (ft): <u>2 1/2'</u> |
| <input type="checkbox"/> Flow Present? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Estimated (ft ³ /sec): | | |

Substrate*: (These values should add up to 100%.)

| | | | | | |
|--------------------|--------------------|--------|--------|------------|-----------|
| <u>85</u> % Cobble | <u>15</u> % Gravel | % Sand | % Silt | % Mud/Clay | % Bedrock |
|--------------------|--------------------|--------|--------|------------|-----------|

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

| |
|-------------------------------------|
| <u>70% close-growing algae fish</u> |
|-------------------------------------|

Water Characteristics*: (Mark all that apply.)

| | | | | | |
|------------------|---------------------------------|---------------------------------|--|--|---|
| Odor: | <input type="checkbox"/> Sewage | <input type="checkbox"/> Musky | <input type="checkbox"/> Chemical | <input checked="" type="checkbox"/> None | <input type="checkbox"/> Other: |
| Color: | <input type="checkbox"/> Clear | <input type="checkbox"/> Green | <input type="checkbox"/> Gray | <input type="checkbox"/> Milky | <input checked="" type="checkbox"/> Other: <u>murky</u> |
| Bottom Deposit: | <input type="checkbox"/> Sludge | <input type="checkbox"/> Solids | <input checked="" type="checkbox"/> Fine sediments | <input checked="" type="checkbox"/> None | <input type="checkbox"/> Other: |
| Surface Deposit: | <input type="checkbox"/> Oil | <input type="checkbox"/> Scum | <input type="checkbox"/> Foam | <input checked="" type="checkbox"/> None | <input checked="" type="checkbox"/> Other: |

Comments: Please attach additional comments (including information from interviews) to this form.

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I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Ann Crawford Date: 6-22-05
 Organization: DNR Position: ES



0849_02A_US



0849_02A_DS





Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

| | | |
|---|--|--------|
| Missouri WBID #: 849-003 | Site Location Description: | |
| Site GPS Coordinates: | Heath's Creek High Point Rd Bridge (new) | |
| Date & Time: 6/22/05 14:44 | Facility Name: | |
| Personnel: Crawford & Peery | Permit Number: | |
| Current Weather Conditions: partly cloudy | Weather Conditions for Past 7 days: dry | |
| Photo Ids: Upstream: 102-104 | Downstream: 105-107 | Other: |

Uses Observed*:

| | | | | |
|---------------------------------------|--------------------------------------|---------------------------------------|---|---------------------------------------|
| <input type="checkbox"/> Swimming | <input type="checkbox"/> Skin diving | <input type="checkbox"/> SCUBA diving | <input type="checkbox"/> Tubing | <input type="checkbox"/> Water skiing |
| <input type="checkbox"/> Wind surfing | <input type="checkbox"/> Kayaking | <input type="checkbox"/> Boating | <input type="checkbox"/> Wading | <input type="checkbox"/> Rafting |
| <input type="checkbox"/> Hunting | <input type="checkbox"/> Trapping | <input type="checkbox"/> Fishing | <input checked="" type="checkbox"/> None of the above | <input type="checkbox"/> Other: |

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

High rock banks on south side of creek. Row crops on other side & meadow

Passerby says cattle in creek. Never known of swimming

Surrounding Conditions*:

(Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

| | | | | |
|--|--------------------------------------|---|--|---|
| <input type="checkbox"/> City/county parks | <input type="checkbox"/> Playgrounds | <input type="checkbox"/> MDC conservation lands | <input type="checkbox"/> Urban areas | <input type="checkbox"/> Campgrounds |
| <input type="checkbox"/> Boating accesses | <input type="checkbox"/> State parks | <input type="checkbox"/> National forests | <input type="checkbox"/> Nature trails | <input type="checkbox"/> Stairs/walkway |
| <input type="checkbox"/> No trespass sign | <input type="checkbox"/> Fence | <input type="checkbox"/> Steep slopes | <input type="checkbox"/> Other: N/A | |

Evidence of Human Use*:

| | | | | |
|--------------------------------------|--|--|---|--|
| <input type="checkbox"/> Roads | <input type="checkbox"/> Foot paths/prints | <input type="checkbox"/> Dock/platform | <input type="checkbox"/> Livestock Watering | <input type="checkbox"/> RV / ATV Tracks |
| <input type="checkbox"/> Rope swings | <input type="checkbox"/> Camping Sites | <input type="checkbox"/> Fire pit/ring | <input type="checkbox"/> NPDES Discharge | <input type="checkbox"/> Fishing Tackle |
| <input type="checkbox"/> Other: N/A | | | | |

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

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Stream Morphology:

Upstream View Physical Dimensions:

| | | | | |
|--|-----------------------|---|--|------------------------------------|
| <input type="checkbox"/> Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input type="checkbox"/> Run | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input checked="" type="checkbox"/> Pool | Width (ft): <u>63</u> | Length (ft): <u>130</u> | Avg. Depth (ft): <u>Cannot see bottom</u> | Max. Depth (ft): <u>Seems deep</u> |
| <input checked="" type="checkbox"/> Flow | Present? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Estimated (ft ³ /sec): <u>Cannot tell</u> | |

Downstream View Physical Dimensions:

Big - deep & wide

| | | | | |
|--|-----------------------|---|---|------------------------------------|
| <input type="checkbox"/> Riffle | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input type="checkbox"/> Run | Width (ft): | Length (ft): | Avg. Depth (ft): | Max. Depth (ft): |
| <input checked="" type="checkbox"/> Pool | Width (ft): <u>75</u> | Length (ft): <u>130</u> | Avg. Depth (ft): <u>Cannot see bottom</u> | Max. Depth (ft): <u>Seems deep</u> |
| <input checked="" type="checkbox"/> Flow | Present? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Estimated (ft ³ /sec): <u>as above</u> | |

Substrate*: (These values should add up to 100%.)

cannot tell

| | | | | | |
|--|--|---------------------------------|---------------------------------|-------------------------------------|---|
| <input checked="" type="checkbox"/> % Cobble | <input checked="" type="checkbox"/> % Gravel | <input type="checkbox"/> % Sand | <input type="checkbox"/> % Silt | <input type="checkbox"/> % Mud/Clay | <input checked="" type="checkbox"/> % Bedrock |
|--|--|---------------------------------|---------------------------------|-------------------------------------|---|

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

| |
|--|
| |
|--|

Water Characteristics*: (Mark all that apply.)

| | | | | | |
|------------------|---|--|---|--|---|
| Odor: | <input type="checkbox"/> Sewage | <input type="checkbox"/> Musky | <input type="checkbox"/> Chemical | <input checked="" type="checkbox"/> None | <input type="checkbox"/> Other: |
| Color: | <input type="checkbox"/> Clear | <input type="checkbox"/> Green | <input type="checkbox"/> Gray | <input type="checkbox"/> Milky | <input checked="" type="checkbox"/> Other: <u>Murky green brown</u> |
| Bottom Deposit: | <input type="checkbox"/> Sludge | <input type="checkbox"/> Solids | <input type="checkbox"/> Fine sediments | <input type="checkbox"/> None | <input type="checkbox"/> Other: |
| Surface Deposit: | <input checked="" type="checkbox"/> Oil | <input checked="" type="checkbox"/> Scum | <input type="checkbox"/> Foam | <input type="checkbox"/> None | <input type="checkbox"/> Other: |

Comments: Please attach additional comments (including information from interviews) to this form.

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Signed: Ann Crawford Date: 6-22-05
 Organization: DNR Position: ES



0849_03_US



0849_03_DS



